

Marks
3

- A voltaic cell is constructed with a $\text{Cr}_2\text{O}_7^{2-}/\text{Cr}^{3+}$ (in acidic solution) half cell and a Sn/Sn^{2+} half cell. Measurement shows that the Sn electrode is negative. Write the balanced half equations and the overall spontaneous reaction.

reduction half equation	
oxidation half equation	
overall reaction	

3

- How many hours will it take to produce 1.00 kg of aluminium metal from a molten Al^{3+} salt, using a current of 100 A?

	Answer: